

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for identifying a unique electronic mail message in a plurality of electronic mail messages extracted from an electronic mail messaging system, the method comprising:

retrieving from a first mailbox on the electronic mail messaging system a ~~copy of a first~~ message, ~~the message including a plurality of message properties;~~

computing a first message tag ~~from a subset of the plurality of message properties at least~~ in part by:

1. concatenating a message sender of the first message and a message sender submission time of the first message into a first resulting string; and

2. applying a hash algorithm to the first resulting string;

storing the first message in a message archive;

storing the first message tag in a single shared index file;

retrieving from a second mailbox on the electronic mail messaging system a second message, wherein the second mailbox is associated with a different electronic mail recipient than the first mailbox;

computing a second message tag at least in part by:

1. concatenating a message sender of the second message and a message sender submission time of the second message into a second resulting string; and

2. applying the hash algorithm to the second resulting string; and

reviewing a list of message tags including the first message tag stored in [[a]] the single shared index file, wherein: the message tags stored in the single shared index file are computed from respective messages properties of messages retrieved from a plurality of mailboxes associated with multiple electronic mail recipients;

i. in the event the second message tag matches the first message tag, determining the second message is a duplicate of the first message already stored in the message archive; and

ii. in the event the second message tag does not match any of the list of message tags including the first message tag, determining the second message is not a duplicate message already stored in the message archive and subsequently:

storing the second message in the message archive; and

storing the second message tag in the single shared index file.

~~determining based upon whether the message tag is found in the single shared index file whether the message is not a duplicate message already stored in a message archive; and~~

~~storing the message tag in the single shared index file and storing the copy of the message in the message archive if it is determined the message is not a duplicate message;~~

~~wherein the copy of the message, if stored in the message archive, is archived for a mandated period of time.~~

2. (Cancelled)

3. (Previously presented) The method of claim 1, wherein applying a hash algorithm to the message tag forms a uniform string, wherein the uniform string has a predetermined length.

4. (Original) The method of claim 3, wherein the hash algorithm is an MD5 hash algorithm.

5. (Canceled)

6. (Canceled)

7. (Original) The method of claim 1, wherein the index file is stored in a relational database system.

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Currently amended) A system for identifying a unique electronic mail message, wherein the system is external to an electronic mail messaging system, the system comprising:

a processor configured to:

retrieve from a first mailbox on the electronic mail messaging system a first message;

compute a first message tag at least in part by:

1. concatenating a message sender of the first message and a message sender submission time of the first message into a first resulting string; and

2. applying a hash algorithm to the first resulting string;

store the first message in a message archive;

store the first message tag in a single shared index file;

retrieve from a second mailbox on the electronic mail messaging system a second message, wherein the second mailbox is associated with a different electronic mail recipient than the first mailbox;

compute a second message tag at least in part by:

1. concatenating a message sender of the second message and a message sender submission time of the second message into a second resulting string; and

2. applying the hash algorithm to the second resulting string; and

review a list of message tags including the first message tag stored in the single shared index file, wherein:

i. in the event the second message tag matches the first message tag, determining the second message is a duplicate of the first message already stored in the message archive; and

ii. in the event the second message tag does not match any of the list of message tags including the first message tag, determining the second message is not a duplicate message already stored in the message archive and subsequently:

storing the second message in the message archive; and

storing the second message tag in the single shared index file; and

a memory configured to provide instructions to the processor.

~~means for retrieving from a mailbox on the electronic mail messaging system a copy of an electronic mail message, the electronic mail message including a plurality of message properties;~~

~~means for computing a message tag from a subset of the plurality of message properties at least in part by concatenating a message sender and a message sender submission time and applying a hash algorithm to the resulting string;~~

~~means for comparing the message tag with a list of message tags stored in a single shared index file, wherein the message tags stored in the single shared index file are computed from respective messages properties of messages retrieved from a plurality of mailboxes associated with multiple electronic mail recipients;~~

~~means for determining based upon whether the message tag is found in the single shared index file that the message is not a duplicate message already stored in a message archive;~~

~~means for storing the copy of the message in the message archive if it is determined the message is not a duplicate message; and~~

~~means for storing the message tag in the single shared index file if it is determined the message is not a duplicate message;~~

~~wherein the copy of the message, if stored in the message archive, is archived for a mandated period of time.~~

16. (Canceled)

17. (Cancelled)

18. (Currently amended) The system of claim 15, wherein applying a hash algorithm to the message tag forms a uniform string, wherein the uniform string has a predetermined length.

19. (Original) The system of claim 18, wherein the hash algorithm is an MD5 hash algorithm.

20. (Original) The system of claim 15, wherein the index file is stored in a relational database system.

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)
25. (Canceled)
26. (Canceled)
27. (Canceled)
28. (Canceled)
29. (Canceled)
30. (Canceled)
31. (Canceled)
32. (Canceled)
33. (Canceled)
34. (Canceled)
35. (Canceled)
36. (Canceled)
37. (Currently amended) A system for externally archiving a plurality of electronic mail messages selected from an electronic mail messaging system, the system comprising:
 - an archive server in communication with the electronic mail messaging system;
 - a duplicate checker in communication with the archive server; and
 - an archive message store in communication with the archive server,wherein when the archive server receives a copy of a message from the electronic mail messaging system, a plurality of properties associated with the message are sent from the archive server to the duplicate checker,
 - wherein the duplicate checker computes a message tag for the message using a subset of the properties, at least in part by concatenating a message sender and a message sender submission time and applying a hash algorithm to the resulting string, and compares the computed message tag with a single shared index file, wherein the single shared index file stores message tags computed from respective messages properties of messages retrieved from a plurality of mailboxes associated with ~~multiple~~ different electronic mail recipients,

wherein if the computed message tag matches an entry in the single shared index file, the duplicate checker indicates to the archive server that the message is a duplicate message with at least same said two message properties as another message already stored in the archive message store, otherwise, if the computed message tag does not match an entry in the single shared index file, the computed message tag is added to the single shared index file,

wherein if it is determined the message is not a duplicate message, the archive server stores the copy of the message in the archive message store;

wherein the copy of the message, if stored in the message archive, is archived for a mandated period of time.

38. (Cancelled)

39. (Previously presented) The system of claim 37, wherein applying a hash algorithm to the message tag forms a uniform string, wherein the uniform string has a predetermined length.

40. (Original) The system of claim 39, wherein the hash algorithm is an MD5 hash algorithm.

41. (Original) The system of claim 37, wherein the archive server reads the message from a mailbox on the electronic mail messaging system.

42. (Canceled)

43. (Canceled)

44. (Canceled)

45. (New) A computer program product for identifying a unique electronic mail message in a plurality of electronic mail messages extracted from an electronic mail messaging system, the computer program product being embodied in a computer readable medium and comprising computer instructions for:

retrieving from a first mailbox on the electronic mail messaging system a first message;
computing a first message tag at least in part by:

1. concatenating a message sender of the first message and a message sender submission time of the first message into a first resulting string; and
2. applying a hash algorithm to the first resulting string;

storing the first message in a message archive;

storing the first message tag in a single shared index file;

retrieving from a second mailbox on the electronic mail messaging system a second message, wherein the second mailbox is associated with a different electronic mail recipient than the first mailbox;

computing a second message tag at least in part by:

1. concatenating a message sender of the second message and a message sender submission time of the second message into a second resulting string; and
2. applying the hash algorithm to the second resulting string; and

reviewing a list of message tags including the first message tag stored in [[a]] the single shared index file, wherein:

- i. in the event the second message tag matches the first message tag, determining the second message is a duplicate of the first message already stored in the message archive; and
- ii. in the event the second message tag does not match any of the list of message tags including the first message tag, determining the second message is not a duplicate message already stored in the message archive and subsequently:
 - storing the second message in the message archive; and
 - storing the second message tag in the single shared index file.